

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION

CELLULAR EVOLUTION LLC,

*Plaintiff,*

v.

T-MOBILE US, INC. AND T-MOBILE  
USA, INC.,

*Defendants.*

§§  
§§ Case No. 2:19-cv-00232-JRG  
(Lead Case)

§§ Jury Trial Demanded

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CELLULAR EVOLUTION LLC,

*Plaintiff,*

v.

AT&T MOBILITY LLC AND CRICKET  
WIRELESS LLC,

*Defendants.*

§§ Case No. 2:19-cv-00228-JRG  
(Consolidated Case)

§§ Jury Trial Demanded

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**DEFENDANTS' CLAIM CONSTRUCTION BRIEF**

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### **Exhibits Attached to Defendants' Brief**

Ex. No.	Description
1	“Open Letter to Standard Organizations From Operators Harmonization Group on Global 3G (G3G) CDMA Standard,” Technical Specification Group, Radio Access Network, Meeting #4, Miami, 17–19 June 1999 (CE_PA-00002399)
2	Translation of Korean Patent Application 1999-34344 (CEL00009572)

### **Exhibits Cited in Defendants' Brief Attached to Plaintiff's Brief**

Dkt. No.	Description
72-2	U.S. Patent No. 6,741,868
72-3	U.S. Patent No. 7,110,788
72-4	U.S. Patent No. 7,203,514
72-5	U.S. Patent No. 7,505,783
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32	Defendants T-Mobile US, Inc. and T-Mobile USA, Inc. Motion to Dismiss Plaintiff's First Amended Complaint
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62-1	Ex. A (Agreed Constructions) to Joint Claim Construction and Prehearing Statement
72	Plaintiff Cellular Evolutions Opening Claim Construction Brief

**TABLE OF ABBREVIATIONS**

Abbreviation	Description
101 Opp.	Cellular Evolution LLC's Response to Defendants' Motion to Dismiss for Lack of Patent Eligibility Under Section 101 (Dkt. No. 39)
101 Sur-Reply	Cellular Evolution LLC's Sur-Reply to Defendants' Motion to Dismiss for Lack of Patent Eligibility Under Section 101 (Dkt. No. 50)
'514 Pat.	U.S. Patent No. 7,203,514 (Dkt. No. 72-4)
'783 Pat.	U.S. Patent No. 7,505,783 (Dkt. No. 72-5)
'788 Pat.	U.S. Patent No. 7,110,788 (Dkt. No. 72-3)
'868 Pat.	U.S. Patent No. 6,741,868 (Dkt. No. 72-2)
Acampora Dec.	Declaration of Dr. Anthony Acampora Regarding Claim Construction (Dkt. 72-8)
Asserted Patents	U.S. Patent Nos. 6,741,868; 7,110,788; 7,203,514; 7,505,783; and 8,285,325
Br.	Plaintiff Cellular Evolution LLC's Opening Claim Construction Brief (Dkt. No. 72)
Defendants	AT&T Mobility LLC, Cricket Wireless LLC, T-Mobile US, Inc., and T-Mobile USA, Inc.
FAC	Plaintiff's October 7, 2019 First Amended Complaint for Patent Infringement against T-Mobile (Dkt. No. 28)
OHG	Operators Harmonization Group
OHG Letter	"Open Letter to Standard Organizations From Operators Harmonization Group on Global 3G (G3G) CDMA Standard," Technical Specification Group, Radio Access Network, Meeting #4, Miami, 17–19 June 1999 (Ex.1, CE PA-00002399)
Plaintiff	Plaintiff Cellular Evolution LLC
POSITA	Person of Ordinary Skill in the Art
T-Mobile	Defendants T-Mobile US, Inc. and T-Mobile USA, Inc.

## INTRODUCTION

All asserted claims require hybrid-type terminals and hybrid-type radio networks. This is confirmed by the intrinsic record and Plaintiff's admissions in this case. Plaintiff has unequivocally **admitted** that all the claims require the use of hybrid-type terminals and radio networks. In its First Amended Complaint, Plaintiff stated:

The improvements disclosed **and claimed** in the Asserted Patents are accomplished by (1) **using a new hybrid terminal instead of the conventional** synchronous terminals and asynchronous terminals . . . [and] (2) **using a new hybrid radio network** that could interface with both synchronous and asynchronous core networks . . .

FAC ¶ 50.<sup>1</sup> Plaintiff's unambiguous statements are the opposite of what Plaintiff asserts here. And, Plaintiff not only admitted that all of the claims require hybrid-type terminals and radio networks, but also set forth additional detailed factual allegations that demonstrate why the claimed terminals and radio networks must be hybrid-type. Plaintiff never mentions its admissions on the central issue in dispute, but those admissions are "conclusively binding" under Fifth Circuit law and preclude Plaintiff's proposed claim construction.

Plaintiff's admissions that the claims require hybrid-type terminals and hybrid-type radio networks are confirmed by the patents. Plaintiff incorrectly asserts that to support the "hybrid-type" requirement, Defendants merely "read in limitations from a handful of preferred embodiments" and "extrinsic evidence that has no relevance." Br. (Dkt. No. 72) at 1. To the contrary, the disclosure of the patents—*i.e.*, the context of the claims as well as the specification and figures—unambiguously discloses that the purported invention and all the claims require a hybrid-type terminal and radio network.

The patents describe the "present invention," consistently, as requiring hybrid-type

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<sup>1</sup> All emphasis added unless otherwise indicated.

terminals and radio networks—starting with the first paragraph of the specification, which explains that the “present invention” involves “a *hybrid type* mobile terminal” and “a *hybrid type* synchronous or *hybrid type* asynchronous radio network.” ’868 Pat. (Dkt. No. 72-2) at 1:9–22. Every description of the “present invention” involves the use of hybrid-type devices, including *twenty-two* instances in which the term “hybrid” is used to describe the terminals and radio networks in the “present invention.” Plaintiff fails to mention that the patents repeatedly describe the “present invention,” let alone that all of those descriptions consistently involve the use of hybrid-type terminals and hybrid-type radio networks.

Likewise, *every disclosed embodiment* of the invention includes a hybrid-type terminal and a hybrid-type radio network. The patents set out two embodiments, labeled “Embodiment 1” and “Embodiment 2.” Both embodiments involve hybrid-type terminals and hybrid-type radio networks. Despite Plaintiff’s implication to the contrary, there are no embodiments of the invention that do not involve a hybrid-type terminal and hybrid-type radio network. Not surprisingly, *every figure* in the patents, other than those showing prior art, also relates to use of hybrid-type terminals and hybrid-type radio networks.

In short, in addition to Plaintiff’s binding admissions, the claims, the repeated description of the “present invention,” and all embodiments mandate that the claims be construed to require hybrid-type terminals and radio networks.

## I. BACKGROUND

### A. Background of the Claimed Invention

The Asserted Patents generally relate to cellular systems, and specifically 3G cellular systems. ’868 Pat. at 1:9–25. Like other cellular systems, prior art 3G cellular systems are made up of three central components:

- (1) **terminal:** the mobile device (e.g., a cell phone), also referred to as user equipment;

- (2) **radio access network or “radio network”:** network equipment that communicates on one side with a terminal (over the air, using radio signals), and on the other side with the core network; and
- (3) **core network:** network equipment that connects to the radio network and is responsible for functions including mobility management and call control.

*Id.* at 2:9–39. The terminal and radio network communicate with one another using a “radio access technology.” Acampora Dec. (Dkt. 72-8) ¶ 30. The core network communicates with the terminal via the radio network using a “core network protocol.” *Id.* ¶ 35.

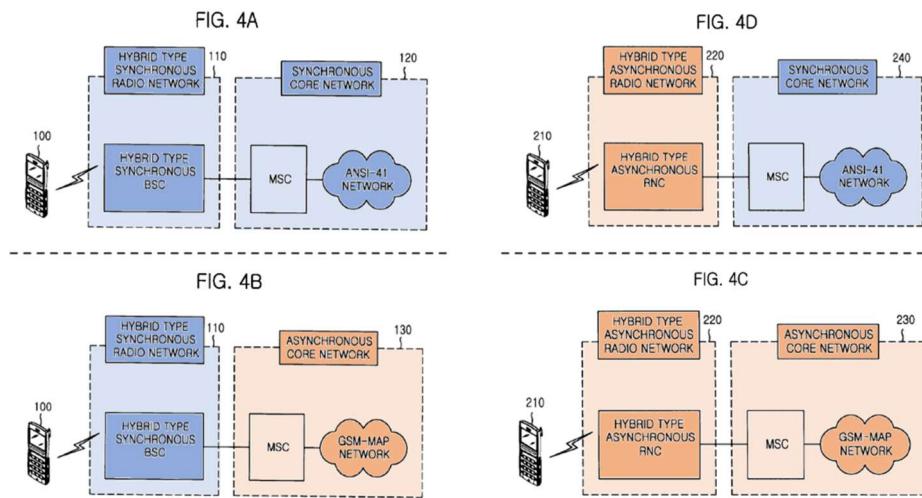
According to the Asserted Patents, each of the radio access technology and the core network protocol can be either “synchronous” or “asynchronous.”<sup>2</sup> The patents explain that in the prior art 3G systems disclosed, the two types had to match—that is, a terminal and radio network using a “synchronous” radio access technology could only work with a core network using a “synchronous” protocol, and likewise for “asynchronous” technologies. ’868 Pat. at 7:59–8:3. Figures 1A and 1B illustrate this. *Id.* at Fig. 1A (synchronous); *id.* at Fig. 1B (asynchronous).

The “Description of the Prior Art” reflects that a “next-generation” system had been proposed that would require use of terminals and radio networks operating using a particular radio access technology that would connect to **both** synchronous and asynchronous core networks. *Id.* at 6:47–7:20. The patents refer to this as the “IMT-2000 system” and explain that the combinations of synchronous and asynchronous networks result in four “interface architectures”—two for “synchronous” radio access technology equipment interfacing with each core network and two for

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<sup>2</sup> The patent uses “synchronous” to refer to the CDMA-2000 radio access technology and to the corresponding ANSI-41 core network protocol. ’868 Pat. at 1:61–65; 18:39–44. The patent uses “asynchronous” to refer to the UMTS radio access technology and the corresponding GSM-MAP core network protocol. *Id.* at 1:66–2:5; 18:48–49. Core network protocols are different from radio access technologies notwithstanding the specification reusing the “synchronous” and “asynchronous” labels for both.

“asynchronous” radio access technology equipment doing the same. *Id.*<sup>3</sup> The patents dub the devices in these architectures “hybrid type” terminals and radio networks to describe their interoperability with *both* synchronous and asynchronous core networks, despite using a single (synchronous *or* asynchronous) radio access technology. The patents later depict these “interface architectures” in Figure 4: 4A and 4B illustrate a “hybrid type synchronous” terminal (100) and radio network (110); 4C and 4D illustrate a “hybrid type asynchronous” terminal (210) and radio network (220):<sup>4</sup>



Both the idea for hybrid-type terminals and radio networks and the specific architectures were in the prior art.<sup>5</sup> It is this “hybrid” technology the patents seek to address. ’868 Pat. at 6:47–7:20.

<sup>3</sup> Specifically, the patent states that “the IMT-2000 system can have the following four interface architectures; first: synchronous terminal—synchronous radio network—synchronous ANSI-41 network, second: synchronous terminal—synchronous radio network—asynchronous GSM-MAP network, third: asynchronous terminal—asynchronous radio network—synchronous ANSI-41 network and fourth: asynchronous terminal—asynchronous radio network—asynchronous GSM-MAP network.” ’868 Pat. at 6:56–64.

<sup>4</sup> Blue coloring indicates “synchronous” radio access and core network technologies. Orange coloring indicates “asynchronous” radio access and core network technologies.

<sup>5</sup> See Acampora Dec. ¶¶ 39–45 (citing Ex. 1, OHG Letter and Ex. 2, English Translation of Korean parent application KR-1999-34344, CEL00009572 at CEL00009594-95).

Following the “Description of the Prior Art,” the patents set forth the purported invention, which relates to the use of hybrid-type terminals and radio networks to operate with both synchronous and asynchronous core network types. Specifically, the specification explains:

The *present invention* relates . . . to a method . . . for interfacing among a *hybrid type* mobile terminal, a *hybrid type* base transceiver station . . . and a core network . . . in which a *hybrid type* synchronous or *hybrid type* asynchronous radio network determines an operating type of the core network . . . and sends information about the determined core network operating type . . . to a *hybrid type* mobile terminal.

*Id.* at 1:9–25. The patents consistently describe the “present invention” as requiring “hybrid type” terminals and radio networks and explain that “an object of the present invention” is to allow these hybrid terminals and radio networks using either synchronous or asynchronous technologies to interface with both synchronous and asynchronous core networks. *Id.*; *see also id.* at 1:26–42; *id.* at 1:43–58; *id.* at 8:6–14.

The entire disclosure of the purported invention in the patents focuses on the functionality of and methods used by hybrid-type radio networks and terminals. The specification discloses two primary embodiments, labeled “Embodiment 1” and “Embodiment 2,” both of which require hybrid-type radio networks and terminals. ’868 Pat. at 16:54; *id.* at 20:40.

## B. The Asserted Claims

Plaintiff asserts method claims from five patents in a single family. Each asserted claim recites a preamble that the parties agree is limiting. Each limiting preamble recites a method for “interfacing” among at least a radio network and a terminal. The claims include terminal and/or radio network steps. For example, asserted Claim 7 of the ’783 Patent recites:

7. A method for interfacing between a terminal and a radio network connected to a core network, wherein the radio network is an asynchronous operating type and the core network is a GSM-MAP operating type, said method comprising the steps of:

a) providing the terminal with a message comprising an information element identifying the operating type of the core network, wherein the message includes a system information message.

'783 Pat. (Dkt. 72-5), Cl. 7.

### C. The § 101 Dispute

T-Mobile has twice moved to dismiss all asserted claims on the grounds that they are ineligible under Section 101; the second motion remains pending. Dkt. No. 25; Dkt. No. 32. The 101 proceedings are relevant here because in seeking to avoid ineligibility, Plaintiff made a series of statements (in its First Amended Complaint and briefing) that contradict Plaintiff's current claim construction positions. Specifically, although Plaintiff now contends that not all claims require hybrid-type terminals or radio networks, in its First Amended Complaint and 101 briefing Plaintiff told the Court that ***all claims*** require hybrid-type terminals and radio networks.

Specifically, after T-Mobile moved to dismiss Plaintiff's original Complaint, Plaintiff filed a First Amended Complaint including allegations pointedly intended to avoid an ineligibility determination. *See* FAC ¶¶ 43–61. There, Plaintiff stated that ***all claims require hybrid-type terminals and radio networks***. Without limiting to any particular claim, Plaintiff asserted broadly that the “improvements . . . ***claimed*** in the Asserted Patents are accomplished by (1) ***using a new hybrid terminal*** and “(2) ***using a new hybrid radio network*Id. ¶ 50. Plaintiff repeated the allegation that hybrid-type terminals and radio networks are required throughout its pleading. *See id.* ¶¶ 51–52, 54, 56.**

T-Mobile moved to dismiss the First Amended Complaint. In opposing the motion, Plaintiff repeated the allegations in the First Amended Complaint and reiterated that the invention disclosed in the asserted patents was “achieved by . . . using a new ***hybrid*** terminal” and “using a new ***hybrid*** radio network.” 101 Opp. (Dkt. 39) at 3. In fact, Plaintiff took the position that the core network operating type information—which is sent to or received by the terminal in every asserted claim—“could not be ***used or received*** by prior art terminals.” 101 Sur-Reply (Dkt. 50) at 8. Plaintiff told the Court that “sending the message alone ***offers no benefit*** unless terminals

were ***modified*** to include capabilities for interpreting the message and ***carrying out its directives.***” 101 Opp. at 13–14.

These statements about the requirement of allegedly “new” hybrid-type terminals and hybrid-type radio networks in all asserted claims were essential to Plaintiff’s 101 opposition; indeed, Plaintiff’s contention that the claims required hybrid-type terminals and hybrid-type radio networks formed the ***sole*** basis for Plaintiff’s opposition.

Plaintiff’s claim construction positions contradict its repeated—***and binding***—prior statements. Plaintiff’s claim construction positions fail in view of its prior statements that performing the claimed methods requires hybrid-type terminals and hybrid-type radio networks. Plaintiff cannot have it both ways. Were the Court to accept Plaintiff’s broad proposed constructions, there would no longer be any basis in the record to oppose the 101 motion for any claim not limited to hybrid devices.<sup>6</sup>

## DISPUTED TERMS REQUIRING CONSTRUCTION

### II. “Terminal” Limitations

#### A. “Terminal” Means “Hybrid-Type” Terminal in View of the Claims, the Specification, and Plaintiff’s Statements to the Court

Claim Term	Plaintiff’s Proposal	Defendants’ Proposal
“terminal” as used in the independent claims below ’788 Patent, Cls. 1, 57 ’783 Patent, Cls. 1, 7, 8 ’325 Patent, Cls. 1, 7, 9	Plain and ordinary meaning.	<u>Hybrid-type</u> terminal (construed separately)

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<sup>6</sup> That is because every “disclosed and claimed improvement[] over prior art mobile telecommunications systems” that Plaintiff identified in its 101 briefing relates to “hybrid-type” devices and their functionality. See 101 Opp. at 27–28. Should the Court find a claim does not require “hybrid-type” devices, Plaintiff would have no opposition to a 101 finding for that claim.

The sole dispute between the parties is whether a “terminal” as recited in the claims can encompass prior art devices that Plaintiff has explained are incompatible with the claimed steps. They cannot; each recitation of “terminal” in the asserted claims is properly interpreted as “hybrid-type” terminal. Both the claim language and the specification compel the conclusion that hybrid-type terminals are required for all asserted claims.

As noted above, Plaintiff has admitted that the claims require a hybrid-type terminal. In its First Amended Complaint, Plaintiff alleged that the “improvements disclosed ***and claimed in the Asserted Patents*** are accomplished by (1) ***using a new hybrid terminal*** instead of the conventional synchronous terminals and asynchronous terminals.” FAC ¶ 50. That allegation and other directly relevant factual allegations in the First Amended Complaint (discussed below) constitute judicial admissions that are binding on Plaintiff. *Morales v. Dep’t of the Army*, 947 F.2d 766, 769 (5th Cir. 1991); *see also Google, Inc. v. Beneficial Innovations, Inc.*, No. 2:11-cv-00229-JRG-RSP, 2014 WL 4215402, at \*3 (E.D. Tex. Aug. 22, 2014).

The claim language and specification—including the consistent descriptions of the “present invention” and every disclosed embodiment—also demonstrate to a person of ordinary skill in the art that the claimed methods require the use of hybrid-type terminals in all asserted claims.

***1. The claim language demonstrates that every asserted claim requires the use of a “hybrid-type” terminal***

A POSITA would understand that each asserted claim requires a “hybrid-type” terminal. Specifically, each asserted claim recites either providing the terminal with a message including core network operating type information,<sup>7</sup> or recognizing the message and information at the

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<sup>7</sup> The parties agree that “core network operating type information” and “an information element identifying an operating type of a core network” have the same meaning. *See* Section III.C, below.

terminal. As the patents explain—and Plaintiff asserts in its amended complaint—only a hybrid-type terminal can use such a message because the message tells the terminal what protocol to use in order to match the core network. Only a hybrid-type terminal that can operate with both synchronous and asynchronous core networks, therefore, can make any use of the message. The claimed message has no use if the terminal were not hybrid-type.

For example, each of the claims contains limitations such as the following:

- “providing the terminal with ***a message comprising an information element identifying an operating type of a core network***” ’783 Pat., Cl. 1.
- “recognizing an operating type of the core network on the basis of ***a core network operating type information contained in a message***” ’514 Pat. (Dkt. 72-4), Cl. 3.

A POSITA would understand the claim language reciting “core network operating type information” to require use of a hybrid-type terminal because the sole purpose the patents disclose for this information is to allow a hybrid-type terminal to set its protocol. The patents explain that “a ***hybrid type*** synchronous or asynchronous terminal” “can smoothly be interfaced with the connected core network,” *i.e.*, set its core network protocol interface with either synchronous or asynchronous, “***because it is able to recognize the operating type of the connected core network.***” ’868 Pat. at 23:33–39. The purpose of providing information is to enable the hybrid-type terminal to “adaptively set[] a protocol on the basis of an operating type of the core network” provided. *Id.* at 20:48–52. A POSITA would understand that non-hybrid terminals (prior art), which do not have multiple core network protocols to select from, cannot carry out these functions—and thus,

cannot make any use of the claimed messages. *See id.* at 7:47–64.<sup>8</sup> A POSITA would thus understand from the claimed message that the terminal must be a hybrid-type terminal.

Plaintiff admitted the facts that compel this conclusion, stating to the Court and the public in its First Amended Complaint, that “the act of sending a message that is indicative of the operating type of a core network alone ***could offer no improvement unless prior art terminals were modified to include capabilities*** for interpreting the message and ***carrying out its directives***.<sup>9</sup>” FAC ¶ 51. Plaintiff further admitted that “implement[ing] the methods disclosed by the Asserted Patents” required “an unconventional ***hybrid terminal***.<sup>10</sup> *Id.* ¶ 52. In other words, Plaintiff alleged that the message contained in every claim has no utility for non-hybrid terminals—is “no improvement” at all—and thus, the claims require a hybrid-type terminal. Plaintiff’s admission that only a hybrid-type terminal uses the message in every claim and the message adds no value for a non-hybrid terminal confirms that a POSITA would understand that a hybrid-type terminal is required. Plaintiff’s allegations are binding. *Morales*, 947 F.2d at 769; *Google*, 2014 WL 4215402, at \*3.

Plaintiff reiterated this position in opposing T-Mobile’s second 101 motion, stating that “the use of unconventional ***hybrid terminals*** was ***a necessary implication*** of sending a message with core network operating type information.” 101 Opp. at 13. This statement applies to all asserted claims, because all include a message with core network operating type information. Moreover, in its sur-reply, Plaintiff went further, explaining that core network operating type information “***could not be used or received*** by prior art [non-hybrid] terminals.” 101 Sur-Reply at 8. Plaintiff confirmed how a POSITA would understand the asserted claims: the “core network

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<sup>8</sup> See Acampora Decl. ¶ 63 (“For the reasons discussed throughout this Declaration, a POSITA at the time of the alleged invention would have understood, whether or not explicitly described as having ‘a hybrid operating type,’ that the claim term ‘terminal’ means a ‘hybrid-type terminal.’”).

“operating type information” limitations in all claims require a hybrid-type terminal because the claims would not be directed to sending information that cannot be used or received.

**2. *The specification compels construing all asserted claims to require hybrid-type terminals***

The specification of the Asserted Patents also compels that every asserted claim requires a hybrid-type terminal, both because of the patents’ consistent description of the “present invention” as using hybrid-type terminals, and because every embodiment requires hybrid-type terminals.

**a) *The specification’s description of the “present invention” limits the claims***

The patents repeatedly describe the “present invention” as requiring hybrid-type terminals. As the Federal Circuit has held, such description of the “present invention” limits the claims. *See, e.g., Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007) (description of “the features of ‘the present invention’ as a whole . . . limits the scope of the invention”). Plaintiff fails to mention the repeated descriptions of the “present invention.” Br. at 4–10.

Beginning with the first paragraph of the specification, the Asserted Patents repeatedly describe the “present invention” as a method for interfacing with a “hybrid type mobile terminal”:

The *present invention* relates in general to a technique . . . for interfacing among ***a hybrid type mobile terminal***, a hybrid type base transceiver station/base station controller (BTS/BSC) and a core network in a next-generation telecommunication system, e.g., an international mobile telecommunications-2000 (IMT-2000) system and so on, in which a hybrid type synchronous or hybrid type asynchronous radio network determines an operating type of the core network when the core network has a connection thereto, and sends information about the determined core network operating type and information related to the core network to a ***hybrid type mobile terminal***.

’868 Pat. at 1:9–25. Each of the three paragraphs that make up the description of the “field of the invention” repeats the same point: the second paragraph reiterates that “***the present invention***” is a “method for interfacing among ***a hybrid type mobile terminal***, a hybrid type base transceiver

station/base station controller (BTS/BSC) and a core network.” *Id.* at 1:26–42. The third paragraph continues the refrain that “***the present invention***” is a method for interfacing with a “***hybrid type*** asynchronous terminal.” *Id.* at 1:43–58.

The specification consistently describes the “present invention” as directed to functionality present only in a hybrid-type terminal—that is, interfacing with both synchronous and asynchronous core networks based on received core network information:

As apparent from the above description, ***according to the present invention***, even though ***a hybrid type synchronous or asynchronous terminal*** is connected to ***either a GSM-MAP [“asynchronous”] core network or an ANSI-41 [“synchronous”] core network, it can smoothly be interfaced with the connected core network*** because it is able to recognize the operating type of the . . . network.

*Id.* at 23:33–39. And the patents state that “the method or the apparatus for interfacing ***in accordance with the present invention*** adaptively sets a protocol on the basis of an operating type of the core network.” *Id.* at 20:48–52 (underlined language is in the agreed portion of the “hybrid-type” terminal construction); *see also id.* at 17:52–56. Each of these passages refers to functionality that Plaintiff agrees is part of the proper construction of “hybrid-type” terminal. Br. at 4. Thus, the “present invention” is directed to what Plaintiff admits defines a “hybrid-type terminal.”

The patents’ repeated descriptions of the “present invention” as requiring hybrid-type terminals limit all of the asserted claims as a matter of law, because where, as here, “a patent [ ] describes the features of ‘the present invention’ as a whole, this description limits the scope of the invention.” *Verizon Servs. Corp.*, 503 F.3d at 1308. As the Federal Circuit has explained, the “public is entitled to take the patentee at his word and the word was that the invention” requires hybrid-type terminals. *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (limiting term “fuel injection system component” to “fuel filter” in view of description of “the present invention”).

Accordingly, because the “present invention” is directed to methods of interfacing hybrid-type terminals, all asserted claims should be construed to require hybrid-type terminals. *See Verizon Servs. Corp.*, 503 F.3d at 1308; *Honeywell Int'l, Inc.*, 452 F.3d at 1318.

**b) The entire specification—including all embodiments of the invention—demonstrates that hybrid-type terminals are required**

The entire specification compels the conclusion that the claims are limited to hybrid-type terminals. Indeed, every part of the disclosure of the invention—from the abstract to all figures and embodiments—is directed to methods for interfacing hybrid-type terminals. The uniform disclosure throughout the specification of the use of hybrid-type terminals requires that the claims are so limited. *See, e.g., Alloc, Inc. v. ITC*, 342 F.3d 1361, 1369–70 (Fed. Cir. 2003) (limiting claims to disclosed feature where “all the figures and embodiments disclosed in the asserted patents imply” or “expressly disclose” the feature). Plaintiff incorrectly asserts that Defendants’ construction relies on “a handful of preferred embodiments.” Br. at 1. Hybrid-type terminals are used in ***every embodiment of the invention***. Thus, Plaintiff’s contention that Defendants commit a “cardinal sin” by allegedly importing limitations from preferred embodiments is without merit. Br. at 5.

The specification discloses two embodiments, both of which require hybrid-type terminals. Those embodiments are labeled “Embodiment 1” and “Embodiment 2.” ’868 Pat. at 16:54; *id.* at 20:40. “Embodiment 1” involves “interfacing a ***hybrid type*** synchronous terminal.” *Id.* at 16:55–56. “Embodiment 2” involves “interfacing a hybrid type asynchronous terminal.” *Id.* at 20:41–42.

The remaining disclosure of the patents is in accord. The Abstracts of each of the five patents reference “a ***hybrid-type*** synchronous or asynchronous terminal.” *See, e.g., id.* at Abstract. Likewise, all of the figures involve use of hybrid type terminals. For example, Figures 4A–4D—

the four “core network interface architectures of the next-generation mobile telecommunications system” that the alleged improvements in the patents address—also reference only “*hybrid type*” terminals. *Id.* at 12:19–34; 14:4–44. The same is true for the other figures and accompanying discussion. *See, e.g., id.* at 12:35–48 (Figures 5A–5D showing “protocol structures” for “*hybrid type*” terminals); *id.* at 13:1–22 (Figures 9A–9B, 10A–10D showing fields of broadcast messages “received by a” “*hybrid type*” terminal); *id.* at 13:23–49 (Figures 11A–11B and 12A–12B illustrating methods “in accordance with the present invention” “for interfacing” “*hybrid type*” terminals).

In light of the consistent disclosure throughout the specification describing the invention requiring hybrid-type terminals, the asserted claims are limited to hybrid-type terminals. *See, e.g., Alloc*, 342 F.3d at 1369–70 (limiting claims to disclosed feature where “all the figures and embodiments disclosed in the asserted patents imply” or “expressly disclose” the feature); *see also LBS Innovations LLC v. BP Am., Inc.*, No. 2:11-CV-00407-JRG, 2013 WL 3187167, at \*14 (E.D. Tex. June 20, 2013) (quoting *Alloc*, 342 F.3d at 1370) (limiting a “claimed ‘data field’ to the embodiment disclosed in the specification,” where “the specification makes clear at various points that the claimed invention is narrower than the claim language might imply, it is entirely permissible and proper to limit the claims”).

To support its argument that “non-hybrid” terminals should be within the scope of the claims, Plaintiff contends that the specification discloses and “the claims cover embodiments that use various combinations of hybrid and non-hybrid devices.” Br. at 7. That assertion is incorrect. There are two disclosed embodiments, and both involve hybrid-type terminals. The specification references “non-hybrid” terminals exclusively in describing the prior art (and its disadvantages), *not* in any embodiment of the invention, which is not a basis to expand the claims. *See, e.g., '868*

Pat. at 11:65–12:6; *SSL Servs., LLC v. Citrix Sys., Inc.*, 816 F. Supp. 2d 364, 380–81 (E.D. Tex. 2011) (“The problem with Plaintiffs argument is that Figure 2 does not illustrate an embodiment of the claimed invention, but rather illustrates and describes the prior art.”).

In support of its argument, Plaintiff quotes one passage from the specification, and that passage is not a description of an embodiment; it is part of the “Description of the Prior Art.” Moreover, that passage does not support Plaintiff. To the contrary, it shows that hybrid-type terminals are required. Plaintiff relies on the following sentence: “IMT-2000 system requires new system concept, high-level adaptation technology, and novel network technology, as well as *all conventional technologies which were already adopted in the second [generation] digital cellular system.*” Br. at 7 (quoting ’868 Pat. at 6:43–46). Although that particular sentence does not mention the word “hybrid,” the paragraphs that directly follow the cited sentence make clear that the described system uses hybrid-type terminals and radio networks. *See* ’868 Pat. at 6:56–7:20; *see also id.* Figs. 4A–4D and accompanying text. Thus, the sentence in no way suggests that the claimed methods could be for use with non-hybrid terminals.<sup>9</sup> The specification emphasizes that a non-hybrid terminal cannot adaptively set a protocol. *Id.* at 7:65–8:3.

\* \* \*

In sum, hybrid-type terminals are *not* part of a “permissive embodiment” as Plaintiff asserts (Br. at 9); hybrid-type terminals are required for the “present invention” as repeatedly described, and are used in every one of the described embodiments. Thus, “the intrinsic evidence indicates

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<sup>9</sup> Plaintiff’s incorrect assertion also cannot be reconciled with other portions of its brief. Plaintiff states: “*All of the preferred embodiments* in the specification . . . *show that the terminal ‘adaptively sets’ a protocol.*” Br. at 19 (emphasis of “terminal” in original). The parties agree that “adaptively setting a protocol” is a function of a hybrid-type terminal and have included that language in the agreed portion of the “hybrid-type terminal” construction. Thus, Plaintiff’s assertion that all embodiments require a terminal that “adaptively sets” a protocol means that all embodiments require a “hybrid-type” terminal.

to a POSITA that the recited [terminal] is referring to a [hybrid-type terminal].” *Phoenix Licensing, LLC v. AAA Life Ins. Co.*, Case No. 2:13-cv-1081-JRG-RSP, 2015 WL 1813456, \*20 (E.D. Tex. Mar. 20, 2015) (holding recitations of “product” limited to “financial product”). All asserted claims should be construed to require hybrid-type terminals.

**3. Plaintiff’s contention that the claims must expressly recite “hybrid” in order to be so limited is wrong and contradicts Plaintiff’s statements to the Court and the public**

In the face of the uniform disclosure in the patents, and Plaintiff’s admissions, requiring hybrid-type terminals, Plaintiff relies almost entirely on a single argument: that the patentee knew how to claim “hybrid” terminals when it wanted to do so by expressly including a “hybrid” modifier, and thus the presence or absence of the “hybrid” modifier in the claim language is dispositive. *See, e.g.*, Br. at 4 (“[T]he asserted claims explicitly specify whether or not the recited terminal must be a hybrid type terminal.”). Plaintiff’s argument is effectively a claim differentiation argument, urging the Court to assign meaning to the use of the word “hybrid” in some claims but not others. But as the Federal Circuit has repeatedly explained, the doctrine of claim differentiation cannot be permitted “to override the strong evidence of meaning supplied by the specification.” *Atlas IP, LLC v. Medtronic, Inc.*, 809 F.3d 599, 607 (Fed. Cir. 2015); *see also Indacon, Inc. v. Facebook, Inc.*, 824 F.3d 1352, 1358 (Fed. Cir. 2016) (claim differentiation “cannot enlarge the meaning of a claim beyond that which is supported by the patent documents”) (quoting *Fenner Invs., Ltd. v. Cellco P’ship*, 778 F.3d 1320, 1327 (Fed. Cir. 2015)).<sup>10</sup>

Plaintiff’s contention is also inconsistent with Plaintiff’s statements elsewhere in its claim construction brief that the absence of a “hybrid” modifier is **not** dispositive and does **not** preclude

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<sup>10</sup> In addition, claim differentiation must be “discount[ed]” where, as here, “it is invoked based on independent claims rather than the relation of an independent and dependent claim.” *Atlas*, 809 F.3d at 607.

requiring a “hybrid-type” limitation. Specifically, Plaintiff argues that Claim 27 of the ’868 Patent, which does not explicitly recite a “hybrid type” radio network, nevertheless “implicitly recites a hybrid-type radio network” because of the context of the recited steps. Br. at 17. Thus, under Plaintiff’s logic applied to Claim 27, the absence of the “hybrid” modifier is not dispositive of whether the claims should be limited to hybrid devices. Plaintiff’s attempt to use that absence to argue other claims should not be limited to hybrid devices fails.

Finally, Plaintiff’s contention that the patentee intentionally omitted “hybrid” modifiers from the later-filed applications in order to expand the claims is irrelevant. *See* Br. at 8–9 (“[O]nly the first-filed ’868 Patent was explicitly drawn to the specific hybrid-type devices . . . . the later-issued claims in the ’788, ’514, ’783, and ’325 patents were broader in scope and demonstrate no intent to limit radio networks to a hybrid operating type.”). A patentee cannot, through use of broader claim language in a continuation application or assertions about such broader language during prosecution, “expand the claims beyond” “what [the inventors] clearly identified as the invention.” *Phoenix Licensing, LLC*, 2015 WL 1813456, \*20. Accordingly, “[w]here, as here, the written description clearly identifies what his invention is, an expression by a patentee during prosecution that he intends his claims to cover more than what his specification discloses is entitled to little weight.” *Honeywell Int’l, Inc.*, 452 F.3d at 1319.<sup>11</sup>

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<sup>11</sup> Plaintiff also argues, without support, that claim language reciting that a radio network has an “asynchronous operating type” “reflects descriptions of non-hybrid asynchronous radio networks in the specification.” Br. at 9. Plaintiff’s assertion is contradicted by the parties’ agreed construction of “wherein the radio network is/has an/the asynchronous operating type,” as “wherein the radio network employs an asynchronous **radio access technology** (for example, UMTS).” Exhibit A (Agreed Constructions) to Joint Claim Construction and Prehearing Statement (Dkt. 62-1). Thus, the “asynchronous” description in this instance has no bearing on whether the terminal is “hybrid-type.” Further, Claim 36 of the ’868 Patent, which depends from Claim 27, recites an option wherein “**the radio network is of the asynchronous operating type.**” Plaintiff has stated that Claim 27 **requires a “hybrid-type” radio network.** Thus, the language Plaintiff relies on could not “reflect[] descriptions of non-hybrid asynchronous radio networks.”

**B. A Hybrid-Type Terminal Is One that Can “Seamlessly Switch” between Synchronous and Asynchronous Core Network Protocols**

Claim Term	Plaintiff’s Proposal	Defendants’ Proposal
“hybrid-type terminal”	a terminal that can adaptively set a protocol to <u>interface</u> with synchronous and asynchronous core networks to match received core network operating type information	a terminal that can adaptively set a protocol to <u>seamlessly switch between interfacing</u> with synchronous and asynchronous core networks to match received core network operating type information

The sole dispute for “hybrid-type terminal” is whether the terminal must “seamlessly” switch between protocols. The patent claims and specification make clear that seamlessly switching between protocols is required. Despite Plaintiff’s current claim construction position, Plaintiff alleged that “seamlessly” switching between protocols was a feature of a hybrid-type terminal in the claims of the Asserted Patents. *See* FAC ¶ 59.

In its brief, Plaintiff concedes that the requirement to “switch” between synchronous and asynchronous core networks is required by the agreed portions of the construction. Br. at 13. Thus, Plaintiff has no basis to oppose inclusion of at least “switch” in the construction.

The dispute now boils down to whether the required switching must be “seamless,” consistent with the disclosure of the invention in the Asserted Patents and as alleged by Plaintiff in its First Amended Complaint. Because Plaintiff offers no valid reason to depart from the disclosure of the specification or to ignore its binding admissions, the Court should adopt Defendants’ construction.

The patents’ description of the “present invention” demonstrates that the claimed terminals must seamlessly switch between protocols. For example, the patents state that “according to the *present invention*, even though a hybrid type synchronous or asynchronous terminal is connected to either a GSM-MAP [“asynchronous”] core network or an ANSI-41 [“synchronous”] core network, it can *smoothly* be interfaced with the connected core network.” *See, e.g.*, ’868 Pat. at

23:33–39. But a terminal cannot “smoothly be interfaced with” either a synchronous or asynchronous network in accordance with the “present invention” if the terminal cannot “seamlessly” switch between the two. In wrongly dismissing the disclosure of “smoothly” interfacing as “a permissive embodiment,” Plaintiff ignores the fact that the feature is not simply an embodiment (much less a permissive one), but rather is disclosed as part of the “present invention” at least *four* times. *Id.*; *see also id.* at 8:14–27; *id.* at 8:28–40; *id.* at 20:48–55. Plaintiff’s argument that “smoothly” interfacing is merely “a **result** of practicing the methods described in the specification” is therefore also wrong—it is not merely an incidental “result,” but a core feature of the invention.<sup>12</sup>

Plaintiff described hybrid terminals “seamlessly” switching in the First Amended Complaint. Consistent with Defendants’ proposed construction, Plaintiff alleged:

The methods disclosed in the Asserted Patents allow a hybrid terminal to **seamlessly switch** from a core network having one synchronization type to a core network having another synchronization type.

FAC ¶ 59; *see also* 101 Opp at 28.

Plaintiff’s argument that the word “seamlessly” “introduces unnecessary ambiguity” is incorrect. Plaintiff offers no explanation why the term was helpful for Plaintiff to explain the patents to the public and the Court, but would not be helpful to a jury. The Court should hold Plaintiff to its word and adopt Defendants’ construction for “hybrid-type terminal.”

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<sup>12</sup> Plaintiff’s “result” argument is also without legal support. The cited portion of *In re Omeprazole Patent Litig.*, 536 F.3d 1361, 1370 (Fed. Cir. 2008), concerns the sufficiency of the evidence supporting infringement and has nothing to do with claim construction, nor does it stand for the proposition Plaintiff cites. *Texas Instruments Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1172 (Fed. Cir. 1993), concerns the effect of a “whereby” clause in a claim that has no relevance here.

### III. “Radio Network” Limitations

#### A. “Radio Network” Means “Hybrid-Type” Radio Network in View of the Claims, the Specification, and Plaintiff’s Statements to the Court

Claim Term	Plaintiff’s Proposal	Defendants’ Proposal
“radio network” <i>as used in the independent claims below</i> ‘788 Patent, Cls. 1, 37, 57 ‘514 Patent, Cls. 3 ‘783 Patent, Cls. 1, 7, 8 ‘325 Patent, Cls. 1, 7, 9	a network including a plurality of base transceiver stations (BTS) and at least a base station controller for controlling the plurality of BTSs in a synchronous or an asynchronous mobile telecommunication system	Hybrid-type radio network ( <u>construed separately</u> ) including a plurality of base transceiver stations (BTS) and at least a base station controller for controlling the plurality of BTSs in a synchronous or an asynchronous mobile telecommunication system

The sole dispute between the parties is whether “radio network” is properly limited to “hybrid-type” radio network. Each recitation of “radio network” is properly interpreted as “hybrid-type” radio network for all reasons discussed above regarding the “terminal” limitations. As with “terminal,” Plaintiff has asserted elsewhere that all the claims require use of a “hybrid radio network.” *See* FAC ¶ 50 (“The improvements disclosed and claimed in the Asserted Patents are accomplished by . . . using a new hybrid radio network.”).

##### **1. *The claim language of all asserted claims requires the use of a “hybrid-type” radio network***

The context of the claims makes clear that all asserted claims require the use of a “hybrid-type” radio network. Specifically, claim language reciting a message containing core network operating type information—present in every asserted claim—teaches a POSITA that the radio network in all asserted claims is a hybrid-type radio network. In fact, Plaintiff told the Court so in its First Amended Complaint: Plaintiff stated that the “improvements disclosed and *claimed* in the Asserted Patents are accomplished by . . . *sending* a system information message *from the hybrid radio network* to the hybrid terminal, which includes new information elements indicating the core network operating type and other information related to the core network.” FAC ¶ 50.

That is, Plaintiff admitted that the sending step is performed not by any device, but by “*the hybrid radio network.*” *Id.*

Plaintiff’s arguments regarding the construction of “radio network” in Claim 27 of the ’868 Patent also confirm that a POSITA would look to the claim context to determine whether a hybrid-type radio network is required, and would conclude that all of the asserted claims require a hybrid-type network. Specifically, Plaintiff states that the context of Claim 27 requires the radio network be “hybrid-type”—even though the modifier “hybrid” is not used to describe the radio network in Claim 27—because it recites “steps that can only be performed by novel radio networks with a hybrid operating type.” Br. at 17. Plaintiff points to steps (a)<sup>13</sup> and (b).<sup>14</sup> But Plaintiff’s argument applies equally to step (c): “providing the terminal with the core network operating type information and information related to the core network as a message through a predetermined channel.” ’868 Pat., Cl. 27(c). All “radio network” claims include a step similar to step (c), and Plaintiff alleged in the First Amended Complaint that those steps are “accomplished by . . . sending a system information message from the hybrid radio network.” FAC ¶ 50. Thus, Plaintiff’s argument demonstrates why a POSITA would understand that the context of all claims requires “hybrid-type” radio networks.

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<sup>13</sup> Step (a) recites: “storing core network operating type information and information related to the core network on a storage device.” ’868 Pat., Cl. 27(a).

<sup>14</sup> Step (b) recites: “reading the core network operating type information and information related to the core network stored on the storage device during a time period of initialization of the BS.” ’868 Pat., Cl. 27(b).

**2. *The specification compels construing all asserted claims to require hybrid-type radio networks***

**a) The patentee's description of the "present invention" limits the claims to use of a hybrid-type radio network**

The patents repeatedly describe the "present invention" as requiring a hybrid-type radio network. Those descriptions of the "present invention" "limit the scope of the invention" and compel a conclusion that "radio network" in all claims means "hybrid-type radio network." *See Verizon Servs. Corp.*, 503 F.3d at 1308.

The patents consistently describe the "present invention" as using a hybrid-type radio network. The description of the "field of the invention" at the start of the patents, for example, discloses that:

the **present invention** relates to a method . . . for interfacing an asynchronous terminal and a **hybrid type asynchronous BTS/BSC** with a core network in a mobile telecommunications system, wherein a **hybrid type asynchronous radio network having a hybrid type asynchronous BTS/BSC** determines an operating type of the core network when the core network has a connection thereto, and sends the determined core network operating type information and information related to the core network to a hybrid type asynchronous terminal . . . .

'868 Pat. at 1:43–57. Each of the three paragraphs describing the "field of the invention" defines "the present invention" as a method for interfacing a "**hybrid type** base transceiver station/base station controller" in a "**hybrid type** synchronous or hybrid type asynchronous radio network." *Id.* at 1:9–57.

Plaintiff does not address these statements of the "present invention.". Br. at 14–16. The patentee's repeated descriptions of the "present invention" as using a hybrid-type radio requires "radio network" to mean "hybrid-type radio network." *Verizon Servs.*, 503 F.3d at 1308; *Honeywell*, 452 F.3d at 1318.

**b) The uniform disclosure of the specification—including all embodiments of the invention—compels construing “radio network” to mean “hybrid-type radio network”**

The specification consistently describes every embodiment of the invention as using “hybrid type” radio networks. As noted above, there are two disclosed embodiments (“Embodiment 1” and “Embodiment 2”). Both of these require hybrid-type radio networks: Embodiment 1 uses a “hybrid type” synchronous radio network. ’868 Pat. at 18:19. Embodiment 2 uses a “hybrid type” asynchronous radio network. *Id.* at 21:10-11.

Every other part of the written description likewise conveys that a hybrid-type radio network must be used. *See, e.g.*, ’868 Pat. at Abstract (“hybrid-type synchronous or asynchronous radio network”); *see also id.* at Figs. 4A–4D, 5A–5D, 9A–9B, 10A–10D, 11A–11B, 12A–1B, and accompanying discussions. The patents contain no disclosure other than the purported invention using a hybrid type radio network. Accordingly, the specification further compels limiting the asserted claims to hybrid-type radio networks. *See, e.g.*, *Alloc*, 342 F.3d at 1369–70; *LBS Innovations*, 2013 WL 3187167, at \*14.

**3. Plaintiff’s “lexicography” argument is inapplicable and inconsistently applied**

Plaintiff argues that the asserted claims—except Claim 27 of the ’868 Patent—are not limited to “hybrid-type” because a passage in the specification purporting to provide a definition of “radio network” does not include a “hybrid-type” limitation, and therefore “the inventor’s lexicography governs.” Br. at 14-15.<sup>15</sup> Plaintiff’s lexicography argument is inapplicable because the passage Plaintiff cites has nothing to do with whether or not the claimed “radio network” must

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<sup>15</sup> The passage Plaintiff relies on recites: “In the specification, a radio network means a network including a plurality of base transceiver stations (BTS) and at least a base station controller for controlling the plurality of BTSs in a synchronous or an asynchronous mobile telecommunication system.” ’868 Patent at 13:53–58.

be hybrid-type. The passage recites hardware components that a radio network includes, such as “a plurality of base transceiver stations (BTS) and at least a base station controller”—components that are part of a hybrid-type radio network. *See* ’868 Pat. at 13:53–58. Defendants’ “radio network” construction includes the passage as written, reciting all components—word-for-word.

While the passage Plaintiff cites says nothing about whether the radio network in the claims is hybrid-type, the rest of the patent—from the multiple descriptions of the “present invention” to every disclosed embodiment—does, and establishes that the claimed radio networks must be hybrid-type. *See* Section III.A.2. The cited “lexicography” neither addresses nor overcomes this evidence.

Plaintiff’s argument also fails because *Plaintiff* argues that Claim 27 requires a “hybrid-type radio network”—even though Claim 27 does not use the word “hybrid” to describe the radio network. Plaintiff does not explain how the supposed “definition” does not apply to Plaintiff’s Claim 27 argument but somehow overcomes the strong intrinsic evidence in the specification for all other claims. Accordingly, “radio network” in all claims should be construed as “hybrid-type radio network.”

#### **B. “Hybrid-Type” Radio Networks Interface with Both Synchronous and Asynchronous Core Networks**

<b>Claim Term</b>	<b>Plaintiff’s Proposal</b>	<b>Defendants’ Amended Proposal<sup>16</sup></b>
“hybrid-type radio network”	No further construction is necessary to clarify what “hybrid-type” means in the context of Claim 27 of the ’868 Patent.	a radio network that interfaces with both synchronous and asynchronous core networks and activates protocols depending on the operating type of the connected core network

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<sup>16</sup> Defendants have amended their proposed construction to focus on what has become apparent is the disputed issue in view of Plaintiff’s brief. Defendants’ prior construction was largely agreed during most of the meet-and-confer process and presented the apparent dispute, as with the “hybrid-type” terminal constructions. In view of Plaintiff no longer proposing a variation of that construction, Defendants’ amended construction focuses the dispute.

The primary dispute between the parties is whether a “hybrid-type” radio network must be capable of interfacing with both synchronous and asynchronous core networks. Plaintiff’s “no construction” and alternative construction<sup>17</sup> proposals both improperly omit this functionality despite the fact that ***Defendants’ construction is taken directly from Plaintiff’s admissions*** in its First Amended Complaint. *See* FAC ¶ 50. Because both the specification and Plaintiff emphasize this functionality as a defining feature of “hybrid” operation, Defendants’ construction should be adopted.

Defendants’ construction reflects Plaintiff’s binding admissions as to what a POSITA would understand is required of a “hybrid-type” radio network. Specifically, in its First Amended Complaint, Plaintiff stated that the “improvements disclosed ***and claimed*** in the Asserted Patents are accomplished by” “using ***a new hybrid radio network*** that could interface with both synchronous and asynchronous core networks and activate protocols depending on the operating type of the connected core network.” FAC ¶ 50 (underlining language corresponding to Defendants’ proposed construction) (internal citations omitted); *see also* 101 Opp. at 3 (same); *id.* at 15 (describing “the use of unconventional hybrid radio networks ***that could communicate with core networks of either type***”). Thus, Plaintiff has admitted that a hybrid-type radio network includes the functionality recited in Defendants’ proposed construction.

Moreover, in its claim construction brief, Plaintiff asserts that Claim 27 of the ’868 Patent implicitly requires a “hybrid-type” radio network because it recites steps that would not “be required ***if the radio network could not interface with both asynchronous and synchronous core***

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<sup>17</sup> As Plaintiff concedes, its “redundant” alternative construction merely “incorporates the steps performed by the radio network of claim 27 and incorporates the proposed construction for the term ‘core network operating type information.’” Br. at 14 n.7, 15 n.8. It is not an attempt to define the term.

*networks.*” Br. at 8 n.5. Plaintiff’s statement confirms that what makes a radio network “hybrid-type,” at least in part, is that the radio network can “interface with both asynchronous and synchronous core networks.”

Finally, Defendants’ construction reflects the specification’s consistent descriptions of a hybrid-type radio network as “being possible to be set as *either a synchronous operating type or an asynchronous operating type.*” ’868 Pat. at 8:45–48; *id.* at 9:6–9 (same); *id.* at 10:25–28 (same); *id.* at 10:41–44 (same); *id.* at 10:60–63 (same). It also reflects the specification’s description of “the present invention,” which explains that “the method or the apparatus for interfacing in accordance with the present invention *adaptively sets a protocol* on the basis of an operating type of the core network and smoothly interfaces among the terminal, *the base station* and the core network.” *Id.* at 20:48–52; *see also id.* at 17:52–56.

Accordingly, Plaintiff’s binding admissions, statements in its claim construction brief, and the description of “hybrid operating type” in the specification all confirm that a POSITA would understand that a “hybrid-type” radio network interfaces with both synchronous and asynchronous core networks.

### C. “Core Network Operating Type Information” / “Information Element Identifying an/the Operating Type of a/the Core Network”

Claim Term	Plaintiff’s Proposal	Defendants’ Proposal
“core network operating type information” / “information element identifying an/the operating type of a/the core network” <i>In all asserted independent claims</i>	information specifying the one or more operating type(s) of the connected core network	<u>adaptively set</u> information specifying the one or more operating type(s) of the connected core network

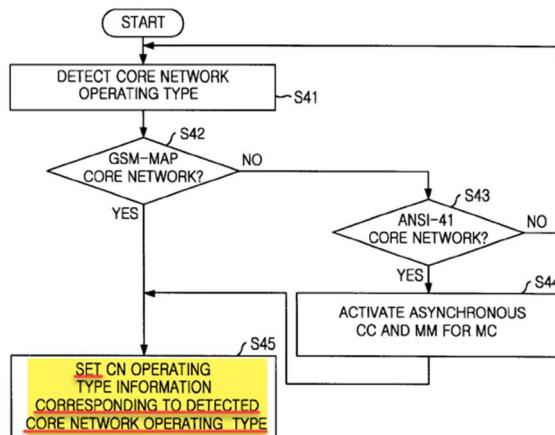
The parties agree that the two recited claim terms, one of which is included in each asserted independent claim, should have the same meaning. The parties also agree that the meaning includes “information specifying the one or more operating type(s) of the connected core network.” The only dispute is whether the terms should be construed to specify that the

information is “adaptively set.” The uniform disclosure of the specification mandates Defendants’ construction.

The specification consistently describes the “core network operating type information” as a message field that the radio network controller “sets . . . corresponding to the detected operating type,” after the radio network has determined whether the core network is synchronous or asynchronous. ’868 Pat. at 22:12–15; *see also id.* at Figs. 11A and 12A; *id.* at 18:25–63; *id.* at 21:15–22:22. The characteristic of being set responsive to the detected core network operating type is present in every disclosure of the “core network operating type information” field. *Id.* In this respect, it is set “adaptively” depending on the detected core network operating type. That characteristic is succinctly captured by Defendants’ construction requiring that the information field be “adaptively set.”

Figure 12A is exemplary of how the patents disclose the “core network operating type information” field and shows that it is adaptively set to correspond to current information about the connected core network. As shown in Figure 12A, in step S41, the radio network controller “detects an operating type of a core network connected thereto,” either by reading from a location in memory or by exchanging messages with the core network. ’868 Pat. at 21:15–30. The radio network controller then takes the results of that completed read or exchange, “*sets* core network operating type information CN Type ***corresponding to the detected operating type***,” and “*inserts the set* CN Type information and information related to core network respectively into specific fields of a system information message.” *Id.* at 21:31–46; *id.* at 22:5–22.

FIG. 12A



Plaintiff does not cite to any disclosure that suggests that the “core network operating type information” message field could be anything other than “adaptively set” to correspond to detected core network operating type information, and there is none. Plaintiff’s opposition to the “adaptively set” limitation is based on a red herring: Plaintiff asserts that the phrase “adaptively sets” appears in the specification only to describe adaptively setting a protocol within a hybrid-type device, and then argues that Defendants’ construction is an improper attempt to narrow the “core network operating type information” element to require this result. Br. at 18–20. Defendants’ construction does no such thing; rather, it concisely describes what the specification discloses as the central feature of the “core network operating type” element: that it is “set . . . corresponding to the detected operating type.” See, e.g., *id.* at Fig. 12A.<sup>18</sup>

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<sup>18</sup> As Plaintiff acknowledges (Br. at 18), the specification uses the term “adaptively set” twice to describe the “present invention”: “*the method and the apparatus in accordance with the present invention adaptively sets a protocol* and interfaces among the terminal, the base station and the core network *on the basis of an operating type of the core network.*” ’868 Pat. at 17:51–55; *see also id.* at 20:48–52 (same). Plaintiff incorrectly asserts that this passage refers exclusively to the terminal; in fact, the passage on its face refers to the “base station,” which is part of the radio network. *See id.* As Dr. Acampora explains, “[i]f the information about the core network operating type were not adaptively set, hybrid type radio networks and terminals could not adaptively and smoothly interface with core networks of different types as described in the ‘present invention.’” Acampora Dec. ¶ 60.

Accordingly, these claim terms should be construed to mean “adaptively set information specifying the one or more operating type(s) of the connected core network.”

### **CONCLUSION**

For the reasons set forth above, Defendants respectfully request that the Court adopt their proposed constructions for the disputed claim terms of the Asserted Patents.

Dated: April 21, 2020

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